

## REMARKS

Claims 1-6 were examined and reported in the Office Action. Claims 1-5 are rejected. Claim 6 is allowed. Claims 1 and 6 are amended to clarification. No new matter is added. Claims 1-6 remain.

Applicant requests reconsideration of the application in view of the following remarks.

### I. 35 U.S.C. § 102(e)

It is asserted in the Office Action that claims 1-5 are rejected under 35 U.S.C. §102(e), as being anticipated by U. S. Patent Application No. 2004/0104847 A1 issued to Killen et al. ("Killen"). Applicant respectfully traverses the aforementioned rejection for the following reasons.

According to MPEP §2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.' (Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). 'The identical invention must be shown in as complete detail as is contained in the ... claim.' (Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, *i.e.*, identity of terminology is not required. (In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990))."

Applicant's amended claim 1 contains the limitations of "[a] microstrip patch antenna, comprising: a lower patch antenna layer having a dielectric layer and a ground plane, for radiating energy by exciting current by a feeding means electrically connected to a lower radiating patch on a side of the dielectric layer; a foam layer for distancing the upper patch antenna layer from the lower patch antenna layer by arranging the foam layer between the lower patch antenna layer and the upper patch antenna layer; a dielectric film on the foam layer; an upper patch antenna layer having a dielectric film, for radiating energy by exciting current by the lower radiating patch

electromagnetically connected to an upper radiating patch on a side of the dielectric film; and a dielectric superstrate located a predetermined distance above the upper patch antenna layer.”

In other words, in order to improve radiation efficiency and bandwidth, Applicant’s claimed invention implements a radiating microstrip patch using a dielectric film under a wavelength of high dynamic frequency and by using a foam layer. (See Applicant’s description, page 6, lines 25-27, page 7, lines 1-10. For reference, though not mentioned explicitly in Applicant’s description, please note that the foam layer has almost the same permittivity as air.

Killen, however, discloses a structure that includes placing magnetic particles below the microstrip patch, which achieves the effect of reducing the volume of the radiating patch, but decreases radiant efficiency and bandwidth of the antenna due to the magnetic particles. Additionally, Applicant’s claimed invention is designed toward improving gain of a microstrip patch antenna using a high permittivity dielectric substrate without injecting magnetic particles. Applicant’s claimed invention asserts a structure where a plurality of the microstrip patch antennae are arranged to decrease the total size of the array antenna as compared with a conventional array antenna. Distinguishable, Killen discloses a microstrip patch antenna structure that decreases the volume of a radiating patch itself using magnetic particles. Unlike Killen, Applicant’s claimed invention decreases the total size of the array antenna.

Therefore, since Killen does not disclose, teach or suggest all of Applicant’s amended claim 1 limitations, Applicant respectfully asserts that a *prima facie* rejection under 35 U.S.C. § 102(e) has not been adequately set forth relative to Killen. Thus, Applicant’s amended claim 1 is not anticipated by Killen. Additionally, the claims that directly or indirectly depend on claim 1, namely claims 2-5, are also not anticipated by Killen for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 102(e) rejections for claims 1-5 are respectfully requested.

**II. Allowable Subject Matter**

Applicant notes with appreciation the Examiner's assertion that claim 6 is allowed.

Applicant respectfully asserts that claims 1-6, as they now stand, are allowable for the reasons given above.

**CONCLUSION**


In view of the foregoing, it is submitted that claims 1-6 patentably define the subject invention over the cited references of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

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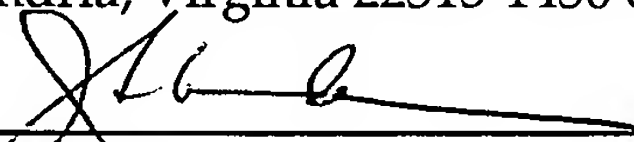
Dated: January 14, 2005

By:   
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I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia 22313-1450 on January 14, 2005.

  
Jean Svoboda